

LETTER REPORT
FOR
CHICAGO INDUSTRIAL WASTE HAULERS
ALSIP, COOK COUNTY, ILLINOIS
U.S. EPA ID: ILD981538689
SSID: FB

TDD: T05-9106-017 / \( \sqrt{92} \)
PAN: EIL0744RAA

January 21, 1993

Prepared by: Michelle L. Laster	Date: 1/21/92
Reviewed by: Patt M Zilling	Date: 1/21/92
Approved by: J.R. Totin, ATATI	Date: //2//92



# ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415 International Specialists in the Environment

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# ecology and environment and account

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415 International Specialists in the Environment

January 21, 1992

Mr. Duane Heaton, Deputy Project Officer U.S. Environmental Protection Agency Emergency Response Section 77 West Jackson Blvd. 5th Floor Chicago, Illinois 60604

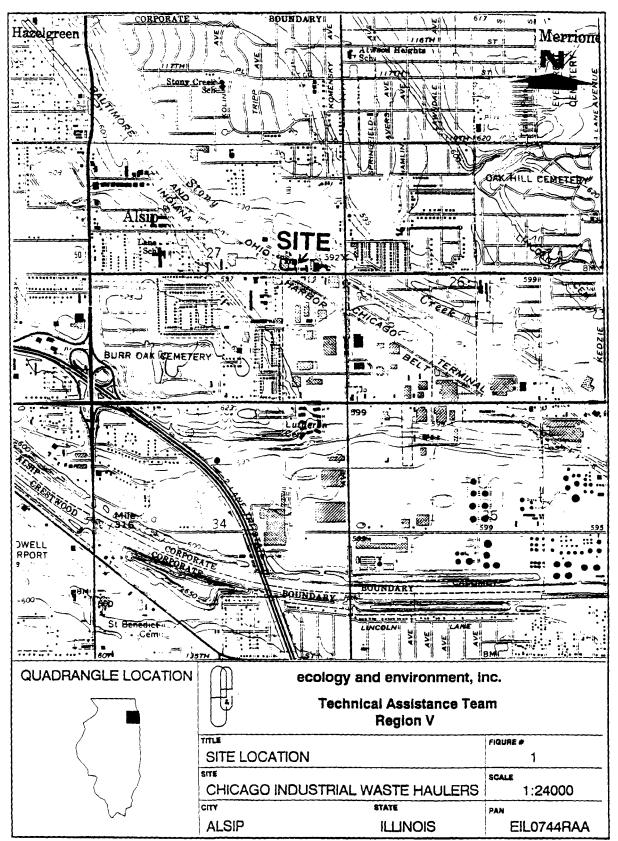
Re: Chicago Industrial Waste Haulers Site Alsip, Illinois TDD# T05-9106-017 PAN# EILO744RAA

Dear Mr. Heaton:

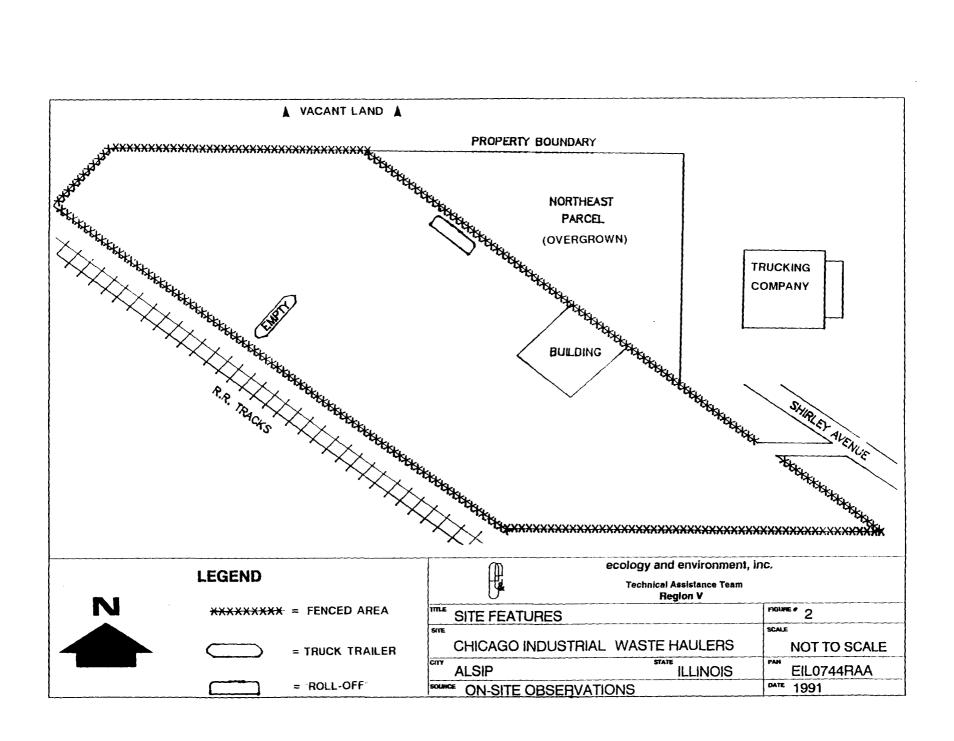
The Ecology and Environment, Inc. (E & E) Technical Assistance Team (TAT) was tasked by the United States Environmental Protection Agency (U.S. EPA) under TDD# T05 9106-017 to provide technical support and confirmation sampling at the Chicago Industrial Waste Haulers site, Alsip, Cook County, Illinois (see Figure 1 for site location). TAT prepared a sampling plan and on July 8, 1991, collected nine surface soil samples for polychlorinated biphenyl (PCB) analysis. PCB concentrations greater than the EPA OSC-recommended limit of 20 parts per million (ppm) were detected at two areas on-site. After reviewing a revised PRP workplan, TAT was tasked to oversee soil excavation and subsequent sampling. In addition to splitting a representative number of samples from the excavated area, TAT also collected four composite soil samples from areas previously unsampled. All sampling activities were photographed.

#### **BACKGROUND**

The Chicago Industrial Waste Haulers (CIWH) site is an abandoned waste oil storage facility covering approximately 6 acres of fenced land at 4206 Shirley Lane in Alsip, Illinois. The site is relatively flat with gravelly surface soils and overgrown with vegetation. The only structures remaining on-site include an empty warehouse building, an empty truck trailer, and an abandoned "roll-off" type of large container. The site is located in a mixed industrial and residential area and is completely fenced with the exception of a parcel of overgrown land northeast of the fenced lot (see Figure 2 for site features). A section of railroad tracks and a light metal manufacturing facility border the site on the southwest and the south, respectively. The east side of the site is bordered by Shirley Avenue and a trucking company and the north side by vacant land. A playground and a residential area lie approximately 200 feet north of the site on the other side of a small intermittent stream named Stoney Creek.



SOURCE: USGS TOPOGRAPHIC MAP, BLUE ISLAND, IL QUADRANGLE, 1963, PHOTOREVISED 1973



Operations began at the site around 1950 when Chicago Tank Cleaners, Inc. (CTC) utilized the property for the storage of waste materials derived during the cleaning of industrial petroleum tanks. CTC changed its name to CIWH in 1986 and began storing a variety of waste materials on-site including slop oil emulsion solids, waste oil-water mixtures, waste oil/solvent mix, ignitable hazardous waste materials, tank bottoms, number six oils, lube oils, and PCB-containing oils. The company discontinued operations at the site later that same year, and the site has remained inactive since. The site is currently under the control of Pollution Control Industries of America (PCIA). (Woodward-Clyde 1990)

A Spill Prevention Control and Countermeasure (SPCC) inspection at the CIWH site in early March 1989 first brought the site to the U.S. EPA's attention. A site assessment conducted later that month by the U.S. EPA and TAT documented the presence of 24 above-ground storage tanks with PCB and flammable labels and numerous unlabelled drums on-site. An U.S. EPA removal action completed in June 1989 consisted of the pumping and disposal of all the liquid hazardous wastes in the on-site storage tanks. (Woodward-Clyde 1990)

In April 1989, the U.S. EPA issued an unilateral Administrative Order (AO) to the site PRP requesting that PCIA assume responsibility for the remaining clean-up activities required at the site. In response to the AO, various wastes and waste storage vessels were shipped off-site for disposal during 1989 and 1990. In addition, the AO required that the extent of contamination in on-site soils be assessed in a comprehensive site investigation. PCIA arranged for various subcontractors to establish and layout a sampling grid consisting of 105 sampling points. In July 1990, surface samples were collected at each point on the grid and analyzed for PCBs. A total of 31 samples contained detectable concentrations of PCBs ranging from 1.2 ppm to 32 ppm. TAT was tasked to conduct confirmation sampling in an effort to verify the PCB concentrations in on-site surface soils reported by the PRP. (Woodward-Clyde 1990)

On July 8, 1991, TAT collected nine surface soil confirmation samples at the CIWH site. Sampling locations were based on the PCB quantities reported in the PRP's extent of contamination study. Analytical results indicated PCB contamination at levels greater than the EPA-recommended limit of 20 ppm in two on-site areas. These areas contained Aroclor 1248 and 1260 at concentrations up to 50 ppm and 120 ppm respectively (E & E, 1991). On October 23, 1991, the PRP submitted a revised workplan for the excavation and subsequent sampling of these two contaminated areas. Upon disposal approval, the PRP established December 16, 1991, as the anticipated removal date. TAT was tasked to oversee excavation activites, split a representative number of samples from the excavated area, collect composite samples from previously unsampled areas, and photograph all site activities.

#### SITE ACTIVITIES

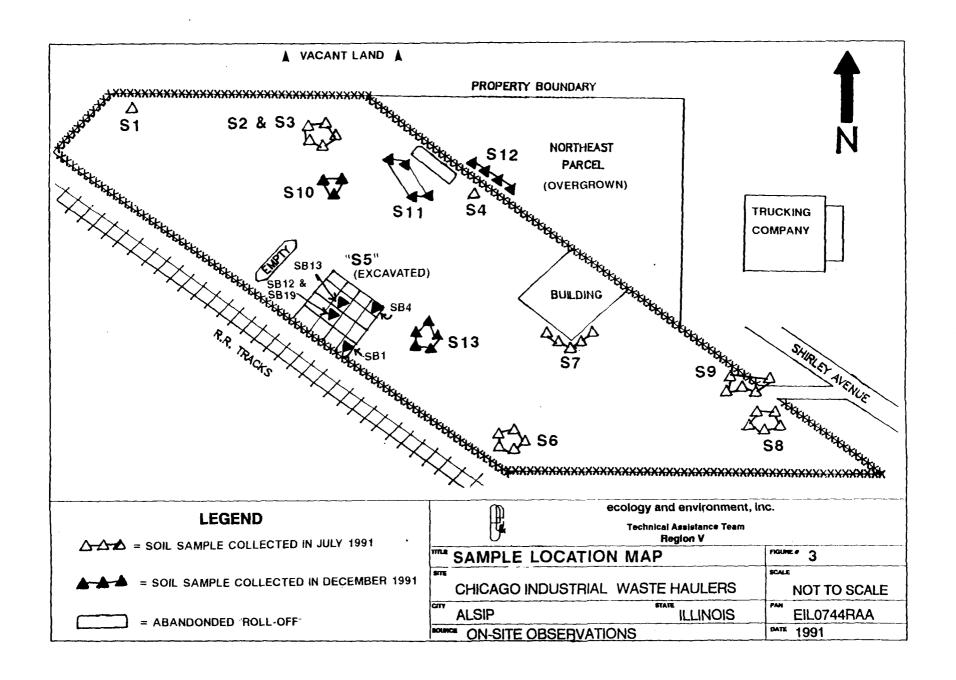
On Monday, December 16, 1991, TAT member (TATm) Michelle Jaster met On-Scene Coordinator (OSC) Len Zintak on-site at 0800 hours. PCIA representative Chuck Smith was already present, along with a number of PCIA subcontractors. Terry Sullivan of Woodward Clyde Consultants, Inc. (WCC) had been subcontracted to collect the PRP's samples. Sullivan had begun marking off a 40' x 40' area for excavation around soil sample location S5.

Smith informed the OSC that only 2 of the 5 proposed dump trucks had been procured for the day's transportation needs. In addition, an apparent discrepancy regarding the second area of concern became apparent. Based on the analytical results from the July sampling event, the OSC and TAT believed the area surrounding sample location S4 was to be excavated. Smith had been told to excavate the area around sample location S6. After discussing these problems with PCIA, Smith determined that the OSC and TAT were correct -- sample location S4 was the proper second excavation area. Smith decided to use the two available dump trucks for excavation activities in the S5 area which had been already marked off. The area surrounding S4 would be excavated at a later date. Additional excavation activities would be postponed until sampling results from today's activities were received. If any other areas of concern were discovered as a result of today's sampling, they would be excavated at the same time as the S4 area.

Excavation activities in the area surrounding S5 began at 1000 hours. Approximately six inches of surface soil was scraped off the area of concern and loaded into the dump trucks. Both trucks were lined with visqueen prior to loading. After loading was complete, both trucks were weighed and their loads covered with visqueen and a heavy tarp. Excavation activities were completed and the trucks left the site for the disposal facility at 1400 hours.

At 1230 hours, TAT began collecting composite soil samples from four areas not previously sampled. See Figure 3 for sample locations. Samples were collected using a stainless steel trowel and bowl. A hammer was used in a few locations to loosen the frozen surface soils. Sample material was excavated from holes 3-6 inches deep and placed in a stainless steel bowl. All four composite samples were prepared by thoroughly mixing sample material from three to five different holes in a location in the same stainless steel bowl. The material was then evenly split between WCC's and TAT's sample jars. TAT provided all sample jars for the composite samples. All sampling equipment was decontaminated between sampling locations with an Alconox and distilled water solution and triple rinsed with distilled water. WCC's samples were given to Sullivan following decontamination of the sample jars. All decontamination water was left on-site in the S4 area with the prior permission of Sullivan. TAT finished collecting the composite samples at 1315 hours.

At this time, Sullivan began preparing the excavated area around S5 for sampling. The 40' x 40' area was subdivided into sixteen 10' x 10' grids. A composite sample consisting of five grab samples was collected in each of the sixteen grids. These samples were collected by Sullivan using a stainless steel trowel and bowl. Surface sample material from five areas in each grid was thoroughly mixed in the stainless steel bowl and evenly split between sample jars. All sampling equipment was decontaminated between grids with a dish soap and distilled water solution and rinsed with distilled water. Sullivan collected four split samples, a duplicate, and a matrix spike/matrix spike duplicate (MS/MSD) for TAT. Sullivan also collected two additional duplicates and one additional MS/MSD for PCIA's laboratory. PCIA provided all sample jars for the grid samples. Grid sampling was completed at 1500 hours. The OSC and TAT left site at 1515 hours. Sullivan would complete labelling of PCIA's samples and deliver them to EMT Laboratory in Morton Grove, Illinois, for PCB analysis.



TAT delivered all the samples to NET Laboratories in Bartlett, Illinois at 0935 hours on Tuesday, December 17, 1991. All samples were analyzed for the following PCBs: Aroclor 1016, 1221, 1232, 1242, 1248, 1254 and 1260. Analytical results are presented in Table 1 and the laboratory data package can be found in Appendix B.

#### SAMPLING RESULTS

Elevated levels of PCBs were detected in two grid samples (see Table 1). Aroclor 1260 was detected at 39.9 ppm and 431.0 ppm in grid samples SB4 and SB13 respectively. Total PCB levels of 41.1 ppm and 446.6 ppm were detected in these grid locations respectively. In addition, PCB levels elevated above the EPA recommended limit of 20 ppm were detected in one of the composite soil samples from a previously unsampled area. Aroclor 1254 was detected at 37.4 ppm at sample location S11. A total PCB level of 80.3 ppm was detected in this area.

#### RECOMMENDATIONS

TAT recommends that some or all of the following measures be taken at the CIWH site in an effort to complete clean-up activities:

- •Review the analytical results for the PRP's complete set of grid samples in an effort to determine if additional areas (other than SB4 and SB13) need to be addressed.
- •Excavate at least an additional 12 inches of surface soil in any grid area containing total PCB levels above the recommended limit of 20 ppm. Collect a confirmatory composite soil sample from each reexcavated grid, as well as from each of its eight surrounding 10' x 10' grids. Excavation activities should continue until a clean-up level of 20 ppm total PCBs has been attained in all grid points.
- •Proceed with excavation and sampling in the area surrounding sample location S4.
- •Address PCB contamination and soil excavation at sample location S11. The area(s) of concern should be gridded, excavated, and sampled according to the revised PRP workplan dated October 30, 1991. At least 12 inches of surface soil should be removed, and composite samples should be collected from each 10' x 10' grid. Excavation activities should continue until a clean-up level of 20 ppm total PCBs has been attained in all grid sections.
- \*Additional confirmatory composite samples should be collected in areas previously unsampled by TAT. Areas of focus may include the northwest corner of the site, and the area northeast of the on-site warehouse building.

TABLE 1
DATA RESULTS

#### Polychlorinated Biphenyl Concentrations (ug/g) for Composite Soil Samples Chicago Industrial Waste Haulers -- Alsip, Illinois

Sample ID	Aroclor 1248	Aroclor 1254	Aroclor 1260
SB1	ND	ND	ND
SB4	ND	1.2	39.9
SB12	ND	0.4	6.8
SB13	1.9	13.7	431.0
SB19	ND	1.6	9.4
S10	0.5	2.5	5.4
S11	21.2	37.4	21.7
S12	ND	1.5	2.5
<b>S13</b>	ND	ND	7.7

NOTE: All values reported in ug/g (ppm).

SB samples were collected from excavated and gridded area (formerly S5). S samples were collected from areas previously unsampled by TAT.

Should you have any comments or questions, please feel free to contact this office.

Sincerely,

Michelle L. Jaster

Michelle L. Jaster

cc: Len Zintak, OSC, U.S. EPA Tom Kouris, TATL, E & E

E & E, 1991, Letter Report for Chicago Industrial Waste Haulers site, prepared by Michelle Jaster.

Woodward-Clyde Consultants, 1990, <u>Site Investigation and Characterization for the Chicago Industrial Waste Haulers Site</u>, prepared for Pollution Control Industries of America.

# APPENDIX A: SITE PHOTOGRAPHS

SITE NAME: Chicago Industrial Waste Haulers

PAGE 1 OF 5

U.S. EPA ID: ILD981538689

TDD: T05-9106-017

PAN: EILO744RAA

DATE: 12/16/91

TIME: 1025

DIRECTION OF PHOTOGRAPH:

N

WEATHER CONDITIONS: Mostly Cloudy Upper 30's

PHOTOGRAPHED BY: M. Jaster

SAMPLE ID (if applicable):

NA

DESCRIPTION: Excavation of gridded S5 area.

DATE: 12/16/91

TIME: 1330

DIRECTION OF PHOTOGRAPH:

NW

WEATHER CONDITIONS: Mostly Cloudy Upper 30's

PHOTOGRAPHED BY: M. Jaster

SAMPLE ID (if applicable):

DESCRIPTION: View of liner being installed in transport vehicle.



SITE NAME: Chicago Industrial Waste Haulers

PAGE 2 OF 5

U.S. EPA ID: ILD981538689

TDD: T05-9106-017

PAN: EILO744RAA

DATE: 12/16/91

TIME: 1400

DIRECTION OF PHOTOGRAPH:

N

WEATHER CONDITIONS: Mostly Cloudy Upper 30's

PHOTOGRAPHED BY: M. Jaster

SAMPLE ID (if applicable): NA

DESCRIPTION: One of two loaded and tarped trucks ready to leave for disposal.

DATE: 12/16/91

TIME: 1510

DIRECTION OF PHOTOGRAPH:

W

WEATHER CONDITIONS: Mostly Cloudy Upper 30's

PHOTOGRAPHED BY: M. Jaster

SAMPLE ID (if applicable):



DESCRIPTION: Decontamination of loader bucket after excavation.

SITE NAME: Chicago Industrial Waste Haulers

PAGE 3 OF 5

U.S. EPA ID: ILD981538689

TDD: T05-9106-017

PAN: EILO744RAA

DATE: 12/16/91

TIME: 1400

DIRECTION OF PHOTOGRAPH:

SW

WEATHER CONDITIONS: Mostly Cloudy Upper 30's

PHOTOGRAPHED BY: M. Jaster

SAMPLE ID (if applicable): NA

DESCRIPTION: Collection of samples from excavated and gridded S5 area.

DATE: 12/16/91

TIME: 1235

DIRECTION OF PHOTOGRAPH:

N/NE

WEATHER
CONDITIONS:
Mostly Cloudy
Upper 30's

PHOTOGRAPHED BY: M. Jaster

SAMPLE ID (if applicable):



DESCRIPTION: Perspective view of composite soil sample S10. Note fence in background -- approximately 100 feet away.

SITE NAME: Chicago Industrial Waste Haulers

PAGE 4 OF 5

U.S. EPA ID: ILD981538689

TDD: T05-9106-017

PAN: EILO744RAA

DATE: 12/16/91

TIME: 1245

DIRECTION OF PHOTOGRAPH:

NE

WEATHER CONDITIONS: Mostly Cloudy Upper 30's

PHOTOGRAPHED BY:

M. Jaster

SAMPLE ID (if applicable):

S11

DESCRIPTION: Perspective view of half of composite soil sample S11.



TIME: 1245

DIRECTION OF PHOTOGRAPH:

NE

WEATHER
CONDITIONS:
Mostly Cloudy
Upper 30's

PHOTOGRAPHED BY: M. Jaster

SAMPLE ID (if applicable): S11



DESCRIPTION: Perspective view of second half of composite soil sample S11.

SITE NAME: Chicago Industrial Waste Haulers

PAGE 5 OF 5

U.S. EPA ID: ILD981538689

TDD: T05-9106-017

PAN: EILO744RAA

DATE: 12/16/91

TIME: 1315

DIRECTION OF PHOTOGRAPH:

W

WEATHER
CONDITIONS:
Mostly Cloudy
Upper 30's

PHOTOGRAPHED BY: M. Jaster

SAMPLE ID (if applicable): S12

DESCRIPTION: Perspective view of composite soil sample S12.

DATE: 12/16/91

TIME: 1305

DIRECTION OF PHOTOGRAPH:

SW

WEATHER
CONDITIONS:
Mostly Cloudy
Upper 30's

PHOTOGRAPHED BY: M. Jaster

SAMPLE ID (if applicable): S13



DESCRIPTION: Perspective view of composite soil sample S13. Note fence in background -- approximately 45 feet away.



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

DEC 30 1991

Ms. Mary Jane Ripp ECOLOGY & ENVIRONMENT, INC 111 West Jackson Blvd. Chicago, IL 60604

12/26/1991

Sample No.: 155279

Job No.: 91.5130

Sample Description: SB1

9106-017; EIL0744RAA

Date Taken: 12/16/1991 Time Taken: 12/16 IEPA Cert. No. 100221

Date Received: 12/17/1991 Time Received: 09:35

WDNR Cert. No. 999447130

Solids, Total

94.50

옿

Results on a dry weight basis.

Heal & Clephan Neal E. Cleghorn Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

## ANALYTICAL REPORT

12/26/1991

Ms. Mary Jane Ripp ECOLOGY & ENVIRONMENT, INC

Sample No.: 155279

111 West Jackson Blvd. Chicago, IL 60604

Job No.: 91.5130

Sample Description:

SB1

9106-017; EIL0744RAA

Date Taken: 12/16/1991

Date Received: 12/17/1991

Time Taken: 14:05

Time Received: 09:35

IEPA Cert. No. 100221

WDNR Cert. No. 999447130

PCB'S - 8080 NONAQUEOUS

PCB-1016	<0.1	ug/g
PCB-1221	<0.1	ug/g
PCB-1232	<0.1	ug/g
PCB-1242	<0.1	ug/g
PCB-1248	<0.1	ug/g
PCB-1254	<0.1	ug/g
PCB-1260	<0.1	ug/g
		-5/ 5

Results on a dry weight basis.

Heal E Clephan eal E. Cleghorn Neal E. Cleghorn Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

#### ANALYTICAL REPORT

Ms. Mary Jane Ripp ECOLOGY & ENVIRONMENT, INC 111 West Jackson Blvd. Chicago, IL 60604

12/26/1991

Sample No.: 155280

Job No.: 91.5130

Sample Description: SB4

9106-017; EIL0744RAA

Date Taken: 12/16/1991 Time Taken: 14:20 IEPA Cert. No. 100221 Date Received: 12/17/1991

Time Received: 09:35 WDNR Cert. No. 999447130

Solids, Total

92.23

옿

Results on a dry weight basis.

Heal & Clephan

Neal E. Cleghorn Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

#### ANALYTICAL REPORT

Ms. Mary Jane Ripp

12/26/1991

ECOLOGY & ENVIRONMENT, INC 111 West Jackson Blvd.

Sample No.: 155280

Chicago, IL 60604

Job No.: 91.5130

Sample Description:

SB4

9106-017; EIL0744RAA

Date Taken: 12/16 Time Taken: 14:20 12/16/1991

IEPA Cert. No. 100221

Date Received: 12/17/1991 Time Received: 09:35 WDNR Cert. No. 999447130

PCB'S - 8080 NONAOUEOUS

PCB-1016	<0.1	ug/g
PCB-1221	<0.1	ug/g
PCB-1232	<0.1	ug/g
PCB-1242	<0.1	ug/g
PCB-1248	<0.1	uq/q
PCB-1254	1.2	ug/g
PCB-1260	39.9	ug/g
	23.3	49/9

Results on a dry weight basis.

Meal E. Cleghorn
Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

#### ANALYTICAL REPORT

Ms. Mary Jane Ripp ECOLOGY & ENVIRONMENT, INC 111 West Jackson Blvd. Chicago, IL 60604

12/26/1991

Sample No.: 155281

Job No.: 91.5130

Sample Description:

SB12

9106-017; EIL0744RAA

Date Taken: 12/16/1991 Time Taken: 15:00 IEPA Cert. No. 100221

Date Received: 12/17/1991

Date Received: 12/17/19 Time Received: 09:35 WDNR Cert. No. 999447130

Solids, Total

91.88

Results on a dry weight basis.

Heal & Clephan Neal E. Cleghorn Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

#### ANALYTICAL REPORT

Ms. Mary Jane Ripp

12/26/1991

ECOLOGY & ENVIRONMENT, INC

Sample No.: 155281

111 West Jackson Blvd. Chicago, IL 60604

Job No.: 91.5130

Sample Description:

SB12

9106-017; EIL0744RAA

Date Taken: 12/16/1991 Date Received: 12/17/1991

Date Received: 12/17 Time Received: 09:35 Time Taken: 15:00 WDNR Cert. No. 999447130 IEPA Cert. No. 100221

PCB'S - 8080 NONAQUEOUS

PCB-1016	<0.1	ug/g
PCB-1221	<0.1	ug/g
PCB-1232	<0.1	ug/g
PCB-1242	<0.1	ug/g
PCB-1248	<0.1	ug/g
PCB-1254	0.4	ug/g
PCB-1260	6.8	ug/g

Results on a dry weight basis.

Neal E. Cleghorn Project Manager

Po Unipro



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#### ANALYTICAL REPORT

Ms. Mary Jane Ripp ECOLOGY & ENVIRONMENT, INC 111 West Jackson Blvd. Chicago, IL 60604

12/26/1991

Sample No.: 155282

Job No.: 91.5130

Sample Description:

SB13

9106-017; EIL0744RAA

Date Taken: 12/16/1991 Time Taken: 15:05

IEPA Cert. No. 100221

Date Received: 12/17/1991 Time Received: 09:35 WDNR Cert. No. 999447130

Solids, Total

92.27

Results on a dry weight basis.

Heal & Clephan Neal E. Cleghorn Project Manager



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# ANALYTICAL REPORT

Ms. Mary Jane Ripp

ECOLOGY & ENVIRONMENT, INC

111 West Jackson Blvd.

Chicago, IL 60604

12/26/1991

Sample No.: 155282

Job No.: 91.5130

Sample Description:

SB13

9106-017; EIL0744RAA

Date Taken: 12/16/1991

12/17/1991

Time Taken: 15:05

Date Received: Time Received: 09:35

WDNR Cert. No. 999447130 IEPA Cert. No. 100221

PCB'S - 8080 NONAQUEOUS

PCB-1016	<0.1	ug/g
PCB-1221	<0.1	ug/g
PCB-1232	<0.1	ug/g
PCB-1242	<0.1	ug/g
PCB-1248	1.9	ug/g
PCB-1254	13.7	นต์/ตั
PCB-1260	431.	ug/g
		57 5

Results on a dry weight basis.

Neal E. Cleghorn Project Manager

Heal & Clepan

30 Hoops



Tel: (708) 289-3100 Fax: (708) 289-5445

## ANALYTICAL REPORT

Ms. Mary Jane Ripp ECOLOGY & ENVIRONMENT, INC 111 West Jackson Blvd. Chicago, IL 60604

12/26/1991

Sample No.: 155283

Job No.: 91.5130

Sample Description:

SB19

9106-017; EIL0744RAA

Date Taken: 12/16, Time Taken: 15:00 Date Taken: 12/16/1991

IEPA Cert. No. 100221

Date Received: 12/17/1991 Time Received: 09:35 WDNR Cert. No. 999447130

Solids, Total

92.45

왕

Results on a dry weight basis.

Neal E. Cleghorn Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

## ANALYTICAL REPORT

Ms. Mary Jane Ripp

ECOLOGY & ENVIRONMENT, INC

111 West Jackson Blvd.

Chicago, IL 60604

12/26/1991

Sample No.: 155283

Job No.: 91.5130

Sample Description:

SB19

9106-017; EIL0744RAA

Date Taken: 12/16/1991

Time Taken: 15:00

Date Received: 12/17/1991

Time Received: 09:35

WDNR Cert. No. 999447130

IEPA Cert. No. 100221 W
PCB'S - 8080 NONAQUEOUS

	FCD B - 6060 NONAQUEOUS	
PCB-1016	<0.1	ug/g
PCB-1221	<0.1	ug/g
PCB-1232	<0.1	ug/g
PCB-1242	<0.1	ug/g
PCB-1248	<0.1	ug/g
PCB-1254	1.6	ug/g
PCB-1260	9.4	ug/g
		3, 3

Results on a dry weight basis.

Heal E Clephon Neal E. Cleghorn Project Manager

Op 1/30/43



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## ANALYTICAL REPORT

Ms. Mary Jane Ripp ECOLOGY & ENVIRONMENT, INC

12/26/1991

111 West Jackson Blvd. Chicago, IL 60604

Sample No.: 155284

Job No.: 91.5130

Sample Description: S10

9106-017; EIL0744RAA

Date Taken: 12/16/1991 Date Received: 12/17/1991 Time Received: 09:35

Time Taken: 12/16
Time Taken: 12:35 IEPA Cert. No. 100221

WDNR Cert. No. 999447130

Solids, Total

60.83

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Results on a dry weight basis.

Heal & Clephan Neal E. Cleghorn Project Manager



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# ANALYTICAL REPORT

Ms. Mary Jane Ripp

ECOLOGY & ENVIRONMENT, INC

111 West Jackson Blvd.

Chicago, IL 60604

12/26/1991

Sample No.: 155284

Job No.: 91.5130

Sample Description:

S10

9106-017; EIL0744RAA

Date Taken: 12/16/1991

Time Taken: 12:35

Date Received: 12/17/1991

Time Received: 09:35 WDNR Cert. No. 999447130

IEPA Cert. No. 100221 PCB'S - 8080 NONAQUEOUS

PCB-1016	<0.1
PCB-1221	<0.1
PCB-1232	<0.1
PCB-1242	<0.1
PCB-1248	0.5
PCB-1254	2.5
PCB-1260	5.4

ug/g ug/g ug/g ug/g ug/g

ug/g

ug/g

Results on a dry weight basis.

Neal E. Cleghorn Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

## ANALYTICAL REPORT

Ms. Mary Jane Ripp ECOLOGY & ENVIRONMENT, INC 12/26/1991

111 West Jackson Blvd. Chicago, IL 60604

Sample No.: 155285

Job No.: 91.5130

Sample Description:

S11

9106-017; EIL0744RAA

Date Taken: 12/16/1991 Time Taken:

12:45 IEPA Cert. No. 100221 12/17/1991

Date Received: 12/17, Time Received: 09:35 WDNR Cert. No. 999447130

Solids, Total

90.30

કૃ

Results on a dry weight basis.

eal & Clephon Neal E. Cleghorn Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

#### ANALYTICAL REPORT

Ms. Mary Jane Ripp

ECOLOGY & ENVIRONMENT, INC

111 West Jackson Blvd. Chicago, IL 60604

12/26/1991

Sample No.: 155285

Job No.: 91.5130

Sample Description:

S11 9106-017; EIL0744RAA

Date Received: 12/17/1991 Date Taken: 12/16/1991

Time Taken: 12:45 Time Received: 09:35 WDNR Cert. No. 999447130 IEPA Cert. No. 100221

PCB'S - 8080 NONAQUEOUS

PCB-1016	<10.	ug/g
PCB-1221	<10.	ug/g
PCB-1232	<10.	ug/g
PCB-1242	<10.	ug/g
PCB-1248	21.2	ug/g
PCB-1254	37,4	ug/g
PCB-1260	21.7	ug/g
		<del>-</del> • -

Results on a dry weight basis.

Neal E. Cleghorn Project Manager

(0) 1/20/90



Tel: (708) 289-3100 Fax: (708) 289-5445

#### ANALYTICAL REPORT

Ms. Mary Jane Ripp

ECOLOGY & ENVIRONMENT, INC

111 West Jackson Blvd.

Chicago, IL 60604

12/26/1991

Sample No.: 155286

Job No.: 91.5130

Sample Description:

S12

9106-017; EIL0744RAA

Date Taken: 12/16/1991

Time Taken: 13:15 IEPA Cert. No. 100221

Date Received: 12/17/1991 Time Received: 09:35 WDNR Cert. No. 999447130

Solids, Total

76.75

Results on a dry weight basis.

Meal E. Cleghorn Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

## ANALYTICAL REPORT

Ms. Mary Jane Ripp

ECOLOGY & ENVIRONMENT, INC

111 West Jackson Blvd.

Chicago, IL 60604

12/26/1991

Sample No.: 155286

Job No.: 91.5130

Sample Description:

S12

9106-017; EIL0744RAA

Date Taken: 12/16/1991

Time Taken: 13:15

Date Received: 12/17/1991 Time Received: 12/17

IEPA Cert. No. 100221

WDNR Cert. No. 999447130

PCB'S - 8080 NONAOUEOUS

	o o o o nomigo boob	
PCB-1016	<0.1	ug/g
PCB-1221	<0.1	ug/g
PCB-1232	<0.1	ug/g
PCB-1242	<0.1	uq/q
PCB-1248	<0.1	uq/q
PCB-1254	1.5	uq/q
PCB-1260	2.5	uq/q
		57 5

Results on a dry weight basis.

Neal E. Cleghorn Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Mary Jane Ripp ECOLOGY & ENVIRONMENT, INC 111 West Jackson Blvd. Chicago, IL 60604 12/26/1991

Sample No.: 155287

Job No.: 91.5130

Sample Description:

S13

9106-017; EIL0744RAA

Date Taken: 12/16/1991 Time Taken: 13:05 IEPA Cert. No. 100221 Date Received: 12/17/1991

Time Received: 09:35 WDNR Cert. No. 999447130

Solids, Total

85.62

9

Results on a dry weight basis.

Heal E Clephon Neal E. Cleghorn Project Manager



Tel: (708) 289-3100 Fax: (708) 289-5445

# ANALYTICAL REPORT

Ms. Mary Jane Ripp

12/26/1991

ECOLOGY & ENVIRONMENT, INC 111 West Jackson Blvd.

Sample No.: 155287

Chicago, IL 60604

Job No.: 91.5130

Sample Description:

S13

9106-017; EIL0744RAA

Date Taken: 12/16/1991 Date Received: 12/17/1991

Time Taken: 13:05

Date Received: 12/17 Time Received: 09:35

IEPA Cert. No. 100221

WDNR Cert. No. 999447130

PCB'S - 8080 NONAQUEOUS PCB-1016 <1.0 PCB-1221 <1.0 PCB-1232 <1.0 PCB-1242 <1.0 PCB-1248 <1.0 PCB-1254 <1.0 PCB-1260 7.7

ug/g ug/g ug/g ug/g ug/g ug/g

ug/g

Results on a dry weight basis.

Meal E. Cleghorn
Project Manager

(b) 100 M2

# APPENDIX B: LABORATORY DATA PACKAGE



# ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415 International Specialists in the Environment

#### MEMORANDUM

DATE: January 22, 1992

TO: Michelle Jaster, Project Manager, E & E, Chicago, IL

FROM: Patrick Zwilling, TAT-Chemist, E & E, Chicago, IL

SUBJ: PCB Data Quality Assurance Review, Chicago Industrial Waste

Haulers, Alsip, Illinois

REF: Analytical TDD: T05-9111-807 Project TDD: T05-9106-017

Analytical PAN: EIL-0744-ABA Project PAN: EIL-0744-RAA

The data quality assurance review of 9 soil samples collected from the Chicago Industrial Waste Haulers site in Alsip, IL has been completed. Analysis for PCBs (U.S. EPA method 8080) was performed by NET Midwest Labs, Bartlett, IL.

The 9 soil samples were numbered: SB1, SB4, SB12, SB13, SB19, S10, S11, S12, and S13.

#### Data Qualifications:

I Holding Time: Acceptable

The samples were collected on December 16, 1991 and extracted on December 18, 1991, within the 14 day requirement for soils. Analysis was performed on December 20, 1991, within the 40 day limit for analysis after extraction.

II Instrument Performance: Acceptable

Standard chromatograms had adequate peak resolution.

III Initial and Continuing Calibration Verification: Acceptable

A. Initial Calibration: The laboratory performed a 5 point initial calibration for the various Aroclors of interest on October 18, 1991. All percent relative standard deviations (%RSD) between calibration factors were within the control limit of <10%.

B. Continuing Calibration: The laboratory performed a continuing calibration on December 19, 1991. All percent differences between initial and continuing calibration response factors were within the control limit of <15%.

#### IV Matrix Spike/Matrix Spike Duplicates: Acceptable

The lab spiked sample SB1 with Aroclor 1254. The percent recovery (%R) for spike sample result was within the control limit of 23 - 139% for soils. The relative percent difference (%RPD) between the matrix spike and matrix spike duplicate was within the control limit of <43% for soils.

#### V Blanks: Acceptable

The lab analyzed blank showed no contamination above the instrument detection limits.

#### VI Compound Identification: Acceptable

A review of 10% of the data indicated that sample retention times matched the calibration standard retention times.

#### VII Compound Quantitation and Reported Detection Limits:

A review of 10% of the data indicated reported values have been correctly calculated and adjusted to reflect dilutions, concentrations, weights, etc.

VIII Performance Evaluation Samples: Not Applicable

#### IX Surrogates: Acceptable

Surrogate recoveries were within the control limits of 20-150% except for samples SB13, S11, and S13. Samples SB13 and S11 surrogates were diluted out and sample S13 surrogate was covered by matrix effect. No action is deemed necessary.

#### X Overall Assessment of Data for Use

The overall usefulness of the data is based on the criteria outlined in "Quality Assurance/Quality Control Guidance for Removal Activities" (April 1990). Based upon the information provided, the data are acceptable for use.